

Application No.: 10/802430

Case No.: 55841US005

Amendments to the Claims:

Please amend claims 2 and 16 as follows:

Listing of Claims:

1. (Cancelled)
2. (Currently amended) The accelerated weathering device [[optical filter]] of claim 18 wherein the glass is cylindrical.
3. (Previously presented) The accelerated weathering device of claim 18 wherein the glass has a thickness of between 0.7mm and 10mm.
4. (Previously presented) The accelerated weathering device of claim 3 wherein the glass has a lead content of 30% by weight.
5. (Previously presented) The accelerated weathering device of claim 18 wherein the optical filter comprises an ultraviolet transmissive optical filter operably coupled to the lead glass optical filter.
6. (Previously presented) The accelerated weathering device of claim 5 wherein the ultraviolet transmissive optical filter is constructed from quartz glass.
7. (Previously presented) The accelerated weathering device of claim 5 wherein the ultraviolet transmissive optical filter includes an infrared absorbing coating.
8. (Previously presented) The accelerated weathering device of claim 5 including a plurality of ultraviolet transmissive optical filters.

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9. (Previously presented) The accelerated weathering device of claim 8 including two ultraviolet transmissive optical filters.
10. (Previously presented) The accelerated weathering device of claim 9 wherein the lead glass optical filter is disposed between the ultraviolet transmissive optical filters.
11. (Previously presented) An accelerated weathering device suitable for testing product samples, the accelerated weathering device comprising:
a weathering fixture adapted to hold the product sample; and
an illuminator disposed approximate the weathering fixture, the illuminator adapted to provide illumination to the product sample; wherein the illuminator includes
a light source having spectral characteristics in at least the range of 200nm to 400nm; and
an optical filter disposed proximate the light source, the optical filter comprising:
a lead glass free of visible light absorbing components and having a thickness selected such that illumination passed through the lead glass has a first ratio of a first total irradiance for wavelengths shorter than 290nm to a second total irradiance for wavelengths between 300nm to 400nm, wherein the first ratio is less than 2.0×10^{-6} ; and
a second ratio of an irradiance at 310nm to the second total irradiance, wherein the second ratio is at least 1.2×10^{-3} .
12. (Previously presented) The accelerated weathering device of claim 11 wherein the thickness of the lead glass is selected to provide a cut-on wavelength for the illumination passed through the lead glass of between 290nm to 300nm.
13. (Previously presented) The accelerated weathering device of claim 11 wherein the illumination from the light source includes a spectral component of at least 290nm to 400nm.

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14. (Previously presented) The accelerated weathering device of claim 11 wherein the illumination from the light source includes an irradiance of between 0.35 W/m^2 and 1.31 W/m^2 at 340nm.

15. (Previously presented) An accelerated weathering device suitable for testing product samples, the accelerated weathering device comprising:
a weathering fixture adapted to hold the product sample; and
an illuminator disposed approximate the weathering fixture, the illuminator adapted to provide illumination to the product sample; wherein the illuminator includes

a light source having spectral characteristics in at least the range of 200nm to 400nm; and

an optical filter disposed proximate the light source the optical filter comprising:

a lead glass free of visible light absorbing components and having a thickness selected such that the filtered illumination has

a cut-on wavelength of between 290nm and 300nm; and

a ratio of an irradiance at 310nm to a total irradiance for wavelengths between 300nm and 400nm wherein the ratio is at least 1.2×10^{-3} .

16. (Currently amended) An accelerated weathering device suitable for testing product samples, the accelerated weathering device comprising:

a weathering fixture adapted to hold the product sample; and

an illuminator disposed approximate the weathering fixture, the illuminator adapted to provide illumination to the product sample; wherein the illuminator includes

a light source having spectral characteristics in at least the range of 200 nm to 400 nm; and

an optical filter assembly for an accelerated weathering device, the accelerated weathering device having a light source providing illumination, the optical filter assembly comprising:

an ultraviolet transmissive optical filter;

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a lead glass free of visible light absorbing components operably coupled to the ultraviolet transmissive optical filter, the lead glass having a thickness selected such that illumination passed through the optical filter assembly has

a first ratio of a first total irradiance for wavelengths shorter than 290nm to a second total irradiance for wavelengths between 300nm to 400nm, wherein the first ratio is less than 2.0×10^{-6} ; and

a second ratio of an irradiance at 310nm to the second total irradiance, wherein the second ratio is at least 1.2×10^{-3} .

17. (Previously presented) The accelerated weathering device of claim 16 wherein the ultraviolet transmissive optical filter provides at least 60% transmission of light at 250 nm and at least 80% transmission of light at 300 nm.

18. (Currently amended) An accelerated weathering device suitable for testing product samples, the accelerated weathering device comprising:

a weathering fixture adapted to hold the product sample; and

an illuminator disposed approximate the weathering fixture, the illuminator adapted to provide illumination to the product sample;

wherein the illuminator includes

a light source having spectral characteristics in at least the range of 200nm to 400nm; and

an optical filter disposed proximate the light source, the optical filter comprising a glass free of visible light absorbing components and having a lead content of between 0.5% and 50% by weight.